

**REMARKS**

Claim 1 has been amended to recite an initial adhesive strength of not lower than 25 N/cm between the thermoplastic polymer layer (A) and the polyamide-based resin layer (B), and an initial adhesive strength of not lower than 25 N/cm between the polyamide-based resin layer (B) and the thermoplastic resin layer (C). Support is found, for example, at page 7, lines 28-30 and at page 17, lines 25-29 of the specification.

Review and reconsideration on the merits are requested.

Claims 1 and 5-15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,776,195 to Blasko et al in view of U.S. Patent 6,881,460 to Inaba.

Blasko et al was cited as disclosing a tubular polymeric laminate including an inner fluoropolymer layer (thermoplastic resin layer), an outer nylon layer (polyamide-based resin layer), and another resin layer (thermoplastic polymer layer) bonded directly to the fluoropolymer layer. Further, because it is an ethylene-based fluoropolymer, the Examiner considered that the thermoplastic resin would have a carbonyl functional group, where the first layer (polyamide) is directly bonded to the second layer (fluoropolymer) through thermal “fusion” bonding. The Examiner relied on Inaba et al as disclosing a multilayer molding having a polyamide-based resin as an outer layer having an amine value of 10-35 (equivalents/ $10^6$  g) so as to provide a satisfactory level of adhesion strength to an inner layer comprising a fluorine-containing resin. The reason for rejection was that it would have been obvious to apply the amine value of Inaba et al to the polyamide-based resin of Blasko et al so as to promote adhesion and mechanical properties in a multilayer resin molding.

The rejection should be withdrawn because Blasko et al does not disclose a three-layered laminate firmly adhered at both the interface between the thermoplastic polymer layer (A) and

the polyamide-based resin layer (B) and between the polyamide-based resin layer (B) and the thermoplastic resin layer (C) as recited in present claim 1.

The laminated resin molding of the invention has a three (or more) -layered structure comprising a thermoplastic polymer layer (A), a polyamide-based resin layer (B) and a thermoplastic resin layer (C). Furthermore, the laminated resin molding is obtained by a method which comprises laminating by a simultaneous multi-layer coextrusion technique such that good adhesive strength is achieved between (A) and (B) and also between (B) and (C).

Blasko et al does not disclose either a multi-layer tube obtained by simultaneous multi-layer coextrusion of three or more layers or a multi-layer tube having good flexibility.

Regarding this last point, Blasko et al discloses the production method noted below.

With the layers 16 and 18 being co-extruded or otherwise formed, a thermal "fusion" bond may be formed therebetween (col. 5, lines 55-58).

One or more reinforcement layers, 130a-b, may be provided as wound on directly or otherwise to surround the outer surface 12 of the member 10. Each of the reinforcement layers 130 may be conventionally formed as braided, knitted, wrapped or helically wound of monofilament (col. 8, lines 1-16).

Depending upon its construction, cover 140 (i.e., 142 and 144) may be spray-applied, dip coated, cross-heal or coextruded, wrapped or braided over the reinforcement layer 130b (col. 8, lines 57-61).

The moldings obtained by sequential extrusion are substantially different from the claimed moldings obtained by simultaneous multi-layer coextrusion. Specifically, in sequential extrusion, because the outer layer (i.e., cover 140) is extruded on a non-melted and cooled layer (i.e., 130a-b), the bonding strength is insufficient.

The Declaration under Rule 132 of Takeshi Inaba submitted together with the Response filed December 30, 2009 demonstrates that in sequential extrusion, because the outer layer is extruded on a non-melted and cooled layer, the bonding strength is inadequate.

In the Response to Amendment/Arguments, the Examiner considered the Declaration to be unpersuasive as failing to demonstrate that various other extrusion techniques disclosed by Blasko et al would result in a tube structurally different from that of the claimed laminated resin molding, focusing on the fusion bond or weld that is formed between layers 16 and 18.

Although the Examiner focuses on the adhesive strength between layers 16 and 18, Applicants' claimed product has three or more layers. In his Declaration, Mr. Inaba demonstrated that the adhesive strength between the outer and the intermediate layer, corresponding to layer 18 and the "another resin layer," namely, cover 140, results in insufficient bonding strength. To emphasize this difference, claim 1 has been amended to recite both an initial adhesive strength between the thermoplastic polymer layer (A) and the polyamide-based resin layer (B) and between the polyamide-based resin layer (B) and the thermoplastic resin layer (C) of not lower than 25 N/cm, which structure is not met by Blasko et al.

That is, the rejection should be withdrawn because Blasko et al does not disclose a three-layered laminate being firmly adhered at both interfaces thereof.

Withdrawal of the foregoing rejection and allowance of claims 1 and 5-15 is earnestly solicited.

In the event that the Examiner believes that it may be helpful to advance the prosecution of this application, the Examiner is invited to contact the undersigned at the local Washington, D.C. telephone number indicated below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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